

### **Remarks**

Currently, claims 25-31 and 33-52 remain pending in the present application, including independent claims 25, 37, and 46. For example, as amended, independent claim 25 is generally directed to an antimicrobially-treated composite fabric comprising a nonwoven continuous filament substrate hydraulically entangled with pulp fibers. The pulp fibers comprise between about 60% to about 90% by weight of said composite fabric. Greater than about 90% of the pulp fibers present within the composite fabric are covalently bonded to an organosilicone antimicrobial agent.

As shown above, independent claims 25, 37, and 46 have been amended to include the limitation that greater than 90% of the pulp fibers present within the composite fabric are covalently bonded to an organosilicone antimicrobial agent. Support for these amendments can be found in the present application. See, e.g., pg. 21, I. 29 – pg. 22, I. 6 and II. 21-24. No new matter has been added.

In the Final Office Action, independent claims 25, 37, and 46 were rejected in view of U.S. Pat. No. 4,929,498 to Suskind, et al. under 35 U.S.C. § 102 or in the alternative § 103. According to Suskind, et al., nonwoven fabrics, such as airlaid, wetlaid, and hydroentangled, are envisioned whereby a portion (for example, from about 10-50%) of the normal pulp charge is replaced by the antibacterially-modified pulp. (Col 2, II. 16-20). Specifically, from 10% through 50%, preferably from 15% through 25%, of the fibers used to make the web will be those that have been pre-treated with the antimicrobial. (Col 3, II. 36-38). However, Suskind, et al. completely fails to teach or suggest certain limitations of independent claims 25, 37, and 46.

There is simply no teaching or disclosure in Suskind, et al. to hydraulically entangle a nonwoven continuous filament substrate with pulp fibers such that the pulp fibers comprise between about 60% and about 90% by weight of the resulting composite fabric. This particular weight percentage is not simply a design choice, but instead helps provide the fabric with the desired antimicrobial effectiveness and water absorption properties. As such, Applicants respectfully submit that independent claims 25, 37, and 46 are not anticipated by Suskind, et al., and request withdrawal of the 35 U.S.C. § 102 rejection of independent claims 25, 37, and 46.

Additionally, Applicants submit that independent claims 25, 37, and 46 are not obvious in view of Suskind, et al. As discussed above, Suskind, et al. is directed to replacing a portion of the web's pulp with antibacterially-modified pulp. For instance, Suskind, et al. teaches replacing only from 10% to 50% of the normal pulp charge used in forming a web with antibacterially-modified pulp. To the contrary, the composite fabrics of presently pending independent claims 25, 37, and 46 require that greater than 90% of the pulp fibers present within the composite fabric are treated with an organosilicone antimicrobial agent.

The Advisory Action states that Suskind, et al.'s teachings of 10-50% of the fibers are treated with an antimicrobial agent indicates that one can use more antimicrobial agent. However, Applicants respectfully disagree. Suskind, et al. does include a single "Comparative Example" in which an airlaid web was formed from 100% Evergreen pulp using an acrylic binder to which has been added sufficient antimicrobial so that the finished product contains approximately 1.5% antimicrobial by weight. (Col 6, ll. 55-60). Suskind, et al. discloses that the Comparative Example has the same killing rate as

their other Examples, about 90%. Thus, since Suskind, et al. discloses that the killing rate of their comparative example (with 100% treated fibers) is the same as the other examples (10%-50% treated fibers), one of ordinary skill in the art would not be motivated to increase the amount of antimicrobial agent present, since no improved results are taught by Suskind, et al.

In order to reject independent claims 25, 37, and 46, the Office Action appears to attempt to modify the web of the "Comparative Example" of Suskind, et al. by hydraulically entangling its treated fibers with a nonwoven continuous filament substrate to form a composite fabric comprising from about 60% to about 90% by weight pulp fibers, to achieve the limitations of independent claims 25, 37, and 46. However, no motivation or suggestion exists to hydraulically entangle this Comparative Example with a continuous filament substrate such that the treated pulp fibers comprise from about 60% to about 90% of the resulting composite web. As discussed above, Suskind, et al. does not teach or suggest hydraulically entangling pulp fibers into a continuous filament substrate such that the treated pulp fibers comprise from about 60% to about 90% of the resulting composite web.

In any event, when viewed as a whole, one of ordinary skill in the art would not use the web of the "Comparative Example," but rather a web having from only from 10% to 50% of the normal pulp charge used in forming a web with antibacterially-modified pulp (which is the web Suskind, et al. primarily teaches). Thus, no motivation exists to hydraulically entangle a continuous filament substrate with pulp fibers, wherein greater than about 90% of the pulp fibers are derived from antimicrobial-treated cellulosic fibrous material. In fact, Suskind, et al. actually teaches away from the use of pulp

fibers, wherein substantially all (i.e., greater than 90%) of the pulp fibers are derived from anti-microbial-treated cellulosic fibrous material. As such, Applicants submit that independent claims 25, 37 and 46 are patentable over Suskind, et al., either alone or in any combination.

Furthermore, Applicants respectfully submit that any motivation to hydraulically entangle the web of Suskind, et al.'s Comparative Example with a continuous filament substrate improperly stems from improper hindsight analysis of the present Application. According to the present specification, the associative bonds formed between the antimicrobial agent and the pulp fibers are not substantially broken by the mechanical forces of the hydraulic entangling process. Pg. 20, ll. 22-25. As such, independent claims 25, 37, and 46 have been amended to clarify that pulp fibers are covalently bonded to the antimicrobial agent. No teaching or suggestion exists in Suskind, et al. that any such bond would, or even could, survive the hydraulically entangling process.

Not only do the wipers of Suskind, et al. fail to satisfy or suggest the limitations of claims 25, 37, and 46, such wipers are exactly the type that the present invention was designed to overcome. In particular, the main problem with the wipers of Suskind, et al., as addressed in the "Background of the Invention" section of the present application, is that they tend to provide inadequate microbial kill percentage. Pg. 1, l. 26 – pg. 2, l. 3. For instance, Suskind, et al. discloses that the kill rates of approximately 90% were achieved by their exemplary webs, including their Comparative Example. In comparison, the wipers disclosed in the present application can achieve substantially higher bacteria reduction percentages, such as 97% or greater. See, e.g. Tables 1 and 2.

Thus, for at least the reasons set forth above, Applicants respectfully submit that independent claims 25, 37, and 46 are not anticipated by the above-cited reference. Applicants also respectfully submit that at least for the reasons indicated above relating to corresponding independent claims 25, 37, and 46, the corresponding dependent claims are not anticipated by the reference cited. However, Applicants also note that the patentability of the dependent claims does not necessarily hinge on the patentability of independent claims 25, 37, and 46. In particular, some or all of these claims may possess features that are independently patentable, regardless of the patentability of claims 25, 37, and 46.

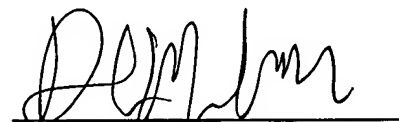
It is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Fortuna is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this Amendment.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully requested,

DORITY & MANNING, P.A.

Date: 6/21/06



Alan R. Marshall  
Registration No. 56,405  
P.O. Box 1449  
Greenville, SC 29602-1449  
Phone: (864) 271-1592  
Facsimile: (864) 233-7342